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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/361,371	07/26/1999	ALAN M. WARWICK	MSFT114130	5436

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EXAMINER
HO, THE T

ART UNIT	PAPER NUMBER
2126	

DATE MAILED: 02/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	09/361,371	WARWICK ET AL.
Office Action Summary	Examiner	Art Unit
	The T. Ho	2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _10 December 2002_ .

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-19_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-19_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)	4)☐ Interview Summary (PTO-413) Paper No(s). _____ .
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)	5)☐ Notice of Informal Patent Application (PTO-152)
3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .	6)☐ Other: .

DETAILED ACTION

1. This action is in response to the amendment filed 12/10/2002

2. Claims 1-23 have been examined and are pending in the application.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1, 7-8, 11, 13 and 19-23 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no teaching in the specification, which describes a SAI management system as claimed in the claims mentioned above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-5, 7-9 and 12 are rejected under 35 U.S.C. 103(a) as being

unpatentable by Hyder U.S Patent No. 6,233,624 in view of APA.

As to claim 1, Hyder teaches a device driver (148, Fig. 2) configured to provide

information and perform actions (lines 13-40 column 6) associated with a hardware

device (h/w 1, Fig. 2); and a driver library (134, Fig. 2) containing software routines

(library of functions, line 67 column 5) to make the information and actions provided by

the device driver (functions incorporate functionality common to most device drivers,

lines 5-8 column 6) accessible to a management system, the library (134, Fig. 2) being

accessible by the device driver (arrows between drivers and 134, Fig. 2) to handle

messages (136 and 156, Fig. 2) issued to the device driver from the management

system. Hyder does not explicitly teach a SAI management system. However, all of the

messages passing to the drivers (Fig. 2) are coming from TRANSPORT 132, wherein

TRANSPORT 132 is receives data destined for dispatch across a network via physical

devices (lines 53-55 column 5). It would have been obvious to consider this as there is

a management system that passes messages or data to the drivers via 132, wherein

the messages or data would be processed by the abstract interface 134 or the drivers

themselves.

APA teaches the concept of using SAI management system (Web-Based

Enterprise Management, line 11 page 1) for accessing and sharing management

information in an enterprise network. It would have been obvious to apply the teachings

of APA to the system of Hyder because this allows monitoring the performance and

status of elements of computer network to prevent data loss and to maximize resource

efficiency as disclosed by APA (lines 8-16 page 1).

As to claim 2, Hyder as modified further teaches the device driver is further

configured with a unique software routine particular to the device driver (perform

specific required processing, such as hardware specific operations, lines 2-4 column 6)

and related to the hardware device (to manage a particular hardware or physical device,

lines 4-5 column 6). Hyder does not explicitly disclose a unique software routine.

However, as discussed above, the device driver only needs to perform specific required

processing which is obviously understood as the device driver contains unique codes to

manage a particular physical device, wherein all of the common functions would be

performed by the library of functions 134 as disclosed by Hyder (line 63 column 5 to line

12 column 6).

As to claim 3, Hyder as modified further teaches the device driver is further

configured to execute the unique software routine (perform an inherent process, line 22

column 7) in response to a call from the driver library (when directed by a call

represented by 136 through 134, lines 24-25 column 7).

As to claim 4, Hyder as modified further teaches the driver library is further

configured to call the unique software routine (134 calls the corresponding driver, lines

25-26 column 6) and cause the unique software routine to execute (performs its

inherent processing on the data packet, lines 26-27 column 6).

As to claim 5, Hyder as modified further teaches the unique software routine is

configured to retrieve data (when directed by a call represented by 136 through 134,

lines 24-25 column 7) and perform actions (perform an inherent process, line 22 column 7) associated with the hardware device (to manage a particular hardware or physical device, lines 4-5 column 6).

As to claim 7, Hyder as modified further teaches the unique software routine is configured to execute a method associated with the information (perform specific required processing, such as hardware specific operations, lines 2-4 column 6) associated with the hardware device (to manage a particular hardware or physical device, lines 4-5 column 6), the method being operative to pass additional information between the device driver and the SAI management system or perform a certain action (lines 13-49 column 6).

As to claim 8, Hyder as modified further teaches the driver library contains a software routine to format the additional information in a format consistent with the SAI management system (messages are passed to 134 for decoding, lines 6-9 column 7).

As to claim 9, Hyder as modified further teaches the driver library is a dynamically accessible (lines 13-40 column 6) software library.

As to claim 12, Hyder as modified further teaches the driver library is a static library (a library of functions for interfacing to the kernel mode, line 67 column 5 to line 2 column 6) associated with the device driver.

As to claims 20 and 22, note the discussion of claim 1 above.

5. Claims 6, 10-11 and 13-19 are rejected under 35 U.S.C. 103(a) as being unpatentable by Hyder in view of APA, and further in view of Cabrera U.S Patent No. 5,978,815.

As to claim 10, Hyder as modified above teaches all interactions between the management system, driver library and device drivers are executed as calls (lines 65-67 column 6). However, Hyper as modified does not explicitly teach these calls are IRPs. Cabrera teaches IRPs are used as the form of messages passing between components of kernel mode (Fig. 7). It would have been obvious to apply the teachings of Cabrera to the system of Hyder because the device driver may use IRP as a form of request and ask the driver library to execute a particular software routine related to handling the IRP.

As to claim 11, note the discussion of claim 10 above. Cabrera further teaches a result will be returned (200, Fig. 7) to the SAI management system, or a client process (172, Fig. 7).

As to claim 13, Hyder as modified discloses receiving a message (136, Fig. 2) from the SAI management system (note the discussion of management system in claim 1), the message including instructions regarding data maintained by an instrumented hardware device (data destined for dispatch across a network via physical devices, lines 53-55 column 5); passing the message (arrows between 134, 140 and 144, Fig. 2) to a driver library (134, Fig. 2) containing software routines for handling the instructions of the message (functions incorporate functionality common to most device drivers, lines 5-8 column 6); and handling the message by the driver library (lines 13-40 column 6). Hyder does not disclose the message is an IRP message. Cabrera teaches IRP. Note the discussion and reason of combining Hyder and Cabrera references in claim 10 above.

As to claim 14, Hyder as modified further discloses passing the IRP to the driver library comprises determining whether the IRP is intended for a particular device driver (the call or request is made into 134 with a destination driver indicator or handle, lines 17-19 column 6).

As to claim 15, Hyder as modified further discloses if the IRP is not intended for the particular device driver (134 evaluating the handle, lines 24-25 column 6), passing the IRP to a next device driver in a driver stack (calls the corresponding driver, lines 24-27 column 6).

As to claim 16, Hyder as modified further discloses calling back to a device driver associated with the instrumented hardware device to request data from (make a calls or alternatively passes, lines 30-32 column 6) or perform an action by the device driver (144 performs its inherent process on the data, lines 36-37 column 6).

As to claim 17, Cabrera further teaches requesting that data be set (read/write data processing, 62 Fig. 3) at the instrumented hardware device (local storage 64, Fig. 3).

As to claim 18, note the discussions of claims 2-5 and 16 above.

As to claim 19, note the discussion of claim 8 above.

As to claim 6, note the discussion of claim 17 above.

As to claims 21 and 23, note the discussion of claim 13 above.

Response to Arguments

6. Applicant's arguments filed 12/10/2002 have been fully considered but they are not persuasive.

Applicant argued that both Hyder and Cabrera do not teach a SAI management system (Remarks, lines 3-4, page 10). In response, SAI management system is a limitation that is not claimed before, and not disclosed in the specification either. However, based on the argument of the applicant filed 12/10/2002, a SAI management system is in fact a Web-Based Enterprise Management system (Remarks, lines 1-2, page 6). This limitation is clearly met by the APA is disclosed in the claim rejection above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to The T. Ho whose telephone number is 703-306-5540. A voice mail service is also available for this number. The examiner can normally be reached on Monday – Thursday, 8:30 am – 6:00 pm, and every other Friday from 8:30 am – 5:00 pm.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C 20231

Or fax to:

- AFTER-FINAL faxes must be signed and sent to (703) 746 – 7238

- OFFICAL faxes must be signed and sent to (703) 746 – 7239

- NON OFFICAL faxes should not be signed, please send to (703) 746 – 7240

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t.h
February 24, 2003